

## Product datasheet for **TP303872**

### Stefin B (CSTB) (NM\_000100) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human cystatin B (stefin B) (CSTB), 20 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC203872 protein sequence <span style="color: red;">Red</span> =Cloning site <span style="color: green;">Green</span> =Tags(s)  MMCGAPSATQPATAETQHIADQVRSQLEEKENKKFPVFKAVSFKSQVWAGTNYFIKVHVGDEDFVHLRVF QSLPHENKPLTLSNYQTNKAKHDELTYP  <span style="color: red;">TR</span> <span style="color: green;">TRPLEQKLISEEDLAANDILDYKDDDDKV</span>
Tag:	C-Myc/DDK
Predicted MW:	11 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<a href="#">NP_000091</a>
Locus ID:	1476
UniProt ID:	<a href="#">P04080</a>
RefSeq Size:	940
Cytogenetics:	21q22.3

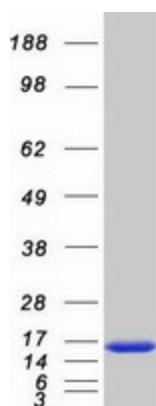

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RefSeq ORF: 294

Synonyms: CPI-B; CST6; EPM1; EPM1A; PME; STFB; ULD

**Summary:** The cystatin superfamily encompasses proteins that contain multiple cystatin-like sequences. Some of the members are active cysteine protease inhibitors, while others have lost or perhaps never acquired this inhibitory activity. There are three inhibitory families in the superfamily, including the type 1 cystatins (stefins), type 2 cystatins and kininogens. This gene encodes a stefin that functions as an intracellular thiol protease inhibitor. The protein is able to form a dimer stabilized by noncovalent forces, inhibiting papain and cathepsins L, h and b. The protein is thought to play a role in protecting against the proteases leaking from lysosomes. Evidence indicates that mutations in this gene are responsible for the primary defects in patients with progressive myoclonic epilepsy (EPM1). One type of mutation responsible for EPM1 is the expansion in the promoter region of this gene of a CCCCCCCCCGCG repeat from 2-3 copies to 30-78 copies. [provided by RefSeq, Jul 2016]

### Product images:



Coomassie blue staining of purified CSTB protein (Cat# TP303872). The protein was produced from HEK293T cells transfected with CSTB cDNA clone (Cat# [RC203872]) using MegaTran 2.0 (Cat# [TT210002]).